

PATENT
Attorney Docket No. 45715.830001.000
Express Mail Label No. EL353030308US

5

UNITED STATES PATENT APPLICATION

FOR

BUNT AID

OF

STEPHEN O. CLARK

10

AND

GREGORY J. DIEKER

2025 RELEASE UNDER E.O. 14176

PATENT
Attorney Docket No. 45715.830001.000
Express Mail Label No. EL353030308US

BUNT AID

FIELD OF THE INVENTION

This invention relates to baseball and, more particularly, to a device useful in instructing a batter in the art of bunting.

5

BACKGROUND OF THE INVENTION

Traditionally, baseball is considered America's pastime. Baseball has existed for years and so have devices to aid in the training of baseball mechanics. In fact numerous devices to aid in baseball mechanics exist, some of which are or have been patented.

10 A baseball bat swing is one of the more difficult mechanics of baseball to teach. Many devices have been designed to assist in the teaching of the baseball swing. Few devices, however, have been designed to assist in teaching the art of bunting, which is one of the more important and more difficult aspects of baseball. United States Patent No. 6,254,498, issued to
15 Tyner, entitled "Instructional Device with Adjustable Ball-Striking Sleeve" is a patent that mentions it could be useful in bunting instruction, but is not specifically designed to aid in teaching the art of bunting.

Thus, it would be desirous to provide an apparatus that would be a useful aid to instruct a batter in the art of bunting.

20

SUMMARY OF THE INVENTION

The foregoing and other features, utilities and advantages of the invention will be apparent from the following more particular description of a preferred embodiment of the invention as illustrated in the accompanying drawings.

25

To attain the advantages and in accordance with the purpose of the invention, as embodied and broadly described herein, a bunt aid for use with a

2025 RELEASE UNDER E.O. 14176

bat having a handle and a barrel is provided. The bunt aid comprises a cup and strap where the strap is adapted to secure the cup to the bat.

Moreover, a bat adapted for use as a bunt training aid is provided. The bat has a handle portion and a barrel portion.

5

BRIEF DESCRIPTION OF THE DRAWING

The above and other objects and advantages of the present invention will be apparent upon consideration of the following detailed description, taken in conjunction with the accompanying drawings, in which like reference characters refer to like parts throughout, and in which:

10 FIG. 1 is a perspective view of a conventional bat (PRIOR ART);
FIG. 2 is a side view of bat 10 having a bunt aid attached to it in accordance with one aspect of the present invention;
FIG. 3 is a top view of bat 10 having a bunt aid attached to it in accordance with one aspect of the present invention;
15 FIG. 4 is a front view of a bunt aid in accordance with one aspect of the present invention; and
FIG. 5, shows an embodiment of a bunt aid in accordance with one aspect of the present invention.

DETAILED DESCRIPTION

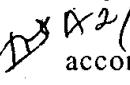
20 *Des A17* FIGS. 1-4 and the following paragraphs describe some embodiments of the present invention. Like reference characters are used wherever possible to identify like components or blocks to simplify the description of the various subcomponents described herein. More particularly, the present invention is described in relation to a conventional baseball bat; however, one of ordinary
25 skill in the art will recognize on reading this disclosure that alternate and equivalent embodiments of the present invention are possible and may be made without departing from the spirit and scope of the present invention.

The present invention will be described in the general context of a baseball bat. FIG. 1 shows a convention baseball bat 10. Generally speaking,

PATENT

Attorney Docket No. 45715.830001.000
Express Mail Label No. EL353030308US

bat 10 can be made of wood, such as pine or maple, metal, such as aluminum, or a composite material, such as polymers or plastic. Further, while bat 10 is described as a baseball bat, one of ordinary skill in the art will recognize that bat 10 could be a softball bat, a pee-wee bat, a miniature bat, a fungo bat, a
5 foam ball, a whiffle ball bat, or the like. Specifically, bat 10 includes a handle portion 12, an intermediate portion 14, and a barrel portion 16. Further, handle portion 12 terminates in a knob 11, although knob 11 is
actually optional, and generally tapers outward from the knob to the
intermediate portion 14. The intermediate portion 14 provides a transition
10 from the handle portion 12 to the barrel portion 16, and the intermediate portion 14 is generally not noticeable on a conventional bat. For metal or aluminum bats, handle portion 12 is often provided with a leather or foam covering to facilitate the grip of the bat 10 by a hitter. In the bat 10 shown by FIG. 10, the intermediate portion 14 can be seen as a transition from the non-grained surface of the handle 12 to the grained surface of the barrel 16.
15 Finally, barrel 16 has a hitting or sweet surface 17 and terminates in a cap 18. Cap 18 can be integral to barrel 16 or separately attached. Further cap 18 can actually be a dimple or cavity on the bat end instead of a cap 18. Notice, while various combinations of parts are possible for a conventional bat, one
20 of ordinary skill in the art would understand that the baseball professional rule book requires that all bats must be one solid piece of wood (professional) or aluminum for all other levels.

 FIG. 2 shows a side view of the bat 10 having a bunt aid 20 in accordance with one embodiment of the present invention attached to the
25 barrel 16 of bat 10. As can be seen, bunt aid 20 is attached to the bat using an attachment means 22, such as a Velcro strap. Using a Velcro strap as the attachment means 22 allows the bunt aid to be snug against the bat, but removable for use with other bats 10 or so bat 10 can be used conventionally. Further, while attachment means 22 is shown as a Velcro strap, other
30 attachment means are usable, such as a rubber ring (such as a rubber band), a strap having snaps, etc. or even combinations, such as a rubber ring around

PATENT

Attorney Docket No. 45715.830001.000
Express Mail Label No. EL353030308US

the barrel of the bat that secures the bunt aid to the bat using Velcro end pieces. Also, attachment means 22 could be a tape or adhesive between the bat 10 and the bunt aid 20. Other attachment means 22 could include a suction cup on the back of bunt aid 20. Alternatively, bunt aid 20 could also 5 be integral to the bat 10. For example, if bat 10 was made out of a polymer, the bat mold could have the bunt aid attached directly to the barrel of the bat. Alternatively, a metal or wooden bat could have the bunt aid integral to the bat. Still another attachment means could be a sleeve of some type. For example, as shown in FIG. 5, bunt aid 20 could be molded to a foam sleeve 10 50 having at least one open end 52 that fits snuggly over the barrel 16 of bat 10, where the other end 54 could be open or closed. Or the sleeve could have a slit (not shown in the drawing) on a side opposite the bunt aid so the sleeve partially wraps around barrel 16, which slit could be anchored using Velcro straps (also not shown in the drawing) or the like.

15 During use, a batter would stand, preferably facing a live pitcher, but possible other types of pitching devices, such as a batting cage or automatic pitch machine, a square off into a bunter stance. The batter would then attempt to catch the ball with the bat using the bunt aid 20.

As shown in best in FIG. 3, bunt aid 20 has an opening 30 to receive a 20 ball, like a baseball, opposite a seating surface 32. Seating surface 32 is generally adjacent bat 10 and seating surface 32 generally conforms to the curvature of the bat 10 to provide a closer fit; however, seating surface 32 does not need to conform to the curve of the bat. Also, seating surface 32 does not need to be a continuous surface, but can have openings to expose the 25 surface of the bat.

FIG A37 FIG. 4 shows a front view of bunt aid 20. Bunt aid 20 has an opening 30, generally tapering sidewalls 40, and a seating surface 32. Seating surface 32 can have an opening 42 to expose bat 10 within the bunt aid 20. Also, while not specifically shown or labeled, bunt aid 20 may have a lip 30 surrounding opening 30. Also, while shown with a taper, sidewalls 40 do not need to be tapered. Also, while shown generally circular, opening 30 could

PATENT

Attorney Docket No. 45715.830001.000
Express Mail Label No. EL353030308US

be elliptical, square, a semicircle, triangular, or any geometric shape. Similarly, opening 42 could be any geometric shape, even though it is shown somewhat elliptical to conform to the hitting surface 17 of barrel 16 of bat 10. While it is desirable to have seating surface 32 generally conform to the bat 5 surface, it may be beneficial to have seating surface 32 define a generally flat surface to ease instruction.

While almost any dimensional configuration is possible, one effective bunt aid has an outer diameter d of about 6 inches for conventional baseball bats and 7 inches for conventional softball bats, an elliptical inner opening 42 10 having a first diameter e of 2 inches for both baseball and softball bats and a second diameter e' of 3 inches. Notice, the dimensions are largely a matter of design choice.

Often the art of bunting is described as catching the baseball with the baseball bat. Thus, the bunt aid should be made with material having a 15 resiliency similar to a baseball glove. Generally, bunt aid 20 could be made of a rubber or foam, such as neoprene. However, other synthetic or natural material could be used. While resiliency is desirous, the bunt aid 20 should be stiff enough to hold a shape. Higher density foams generally hold their shape better than lower density foams, but all types of foams are generally 20 usable. Also, while low density foams don't hold their shape as well, they are normally better at providing a "catching" feel to the bunt action. Further, because the shape of the bunt aid assists in the instruction, stiffer materials, such as metals and woods, could be used instead of foams, rubbers, leathers, or other composite materials. If stiffer materials are used for the bunt aid, it 25 would likely be beneficial to line the bunt aid with a foam or rubber material.

Additionally, while bunt aid is shown as a cone or funnel having a generally elliptical or round shape to match the hitting surface 17 on bat 10 other shapes are useful. For example, because it is desirous to bunt using the lower half of hitting surface 17, bunt aid 20 could be designed as a semi or 30 half circle to aid the instruction of bunting using the lower portion of the hitting surface.

PATENT

Attorney Docket No. 45715.830001.000
Express Mail Label No. EL353030308US

While bunt aid 20 is designed as a cup or funnel greatly increases the visual aids for instruction relating to the art of bunting, the bunt aid could be replaced with a foam sleeve that fits over the barrel of the bat. The foam sleeve would deaden the impact of the baseball with the baseball bat, which 5 provides a "catch" type feel necessary for proper bunting.

Alternatively, bats could specially be designed to aid in teaching bunting. For example, the intermediate portion 14 of bat 10 could couple the handle portion 12 to the barrel portion 16 using a spring (which is not particularly shown). The spring would allow the barrel 16 to flex relative to 10 the handle 12, which would provide a similar mechanic to the bunt aid cup. While a relatively flexible spring would be used, the spring tension could be altered by, for example, turning knob 11 or cap 18 to tighten the spring. Another type of bat could be one in which barrel portion 16 was narrow and the barrel was simulated with a foam sleeve that fit over the narrow barrel 15 portion 16. Thus, the bat size would appear to be a conventional bat, but the barrel would have a soft contact area. In this case, the foam sleeve could be anchored by attachment to the barrel or, perhaps, the cap 18 could couple to the barrel portion 16 to anchor the foam sleeve.

Finally, each of these alternative bunt aid devices could be used in 20 combination. For example, the narrow barrel portion 16 bat could be fitted with a foam sleeve have cup shaped bunt aid 20 molded or otherwise attached to the foam sleeve. The spring-loaded bat could be used in conjunction with the bunt aid 20 or a foam sleeve. One of ordinary skill in the art would recognize that multiple combinations are possible without departing from the 25 spirit and scope of the present invention.

While the invention has been particularly shown and described with reference to some embodiments thereof, it will be understood by those skilled in the art that various other changes in the form and details may be made without departing from the spirit and scope of the invention.